

REMARKS

Reconsideration and allowance are respectfully requested.

The Examiner objects to claims 3 and 7 alleging that "it is unclear what proportions are being differed." A non-limiting example of the programmable boundary position specified in claims 3 and 7 is illustrated in Figure 2. The programmable boundary position permits allocation of the bits of the priority level values to either the first portion or the second portion such that the ratio of the sizes of those first portions relative to the second portions is variable. The original language was believed clear and definite, particularly when read in light of the specification, see e.g., page 7, lines 19-27 and page 8, lines 15-28. But in an attempt to respond to the Examiner's concerns, claims 3 and 7 now recite that the boundary position is programmable so that "different numbers of priority level values may be allocated to said first portions and to said second portions." Like the non-limiting example in the specification, the boundary could be programmed so that eight preemption levels are available for the first portion and two preemption levels are available for the second portion. This amendment is not a narrowing amendment. Withdrawal of the rejection is requested.

Claims 1-2, 4-6, and 8 stand rejected for anticipation based upon US-A-4,075,679 to Christopher. Presumably claims 3 and 7 contain allowable subject matter. This rejection is respectfully traversed.

To establish that a claim is anticipated, the Examiner must point out where each and every limitation in the claim is found in a single prior art reference. *Scripps Clinic & Research Found. v. Genentec, Inc.*, 927 F.2d 1565 (Fed. Cir. 1991). Every limitation contained in the claims must be present in the reference, and if even one limitation is missing from the reference,

then it does not anticipate the claim. *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565 (Fed. Cir. 1986). Christopher fails to satisfy this rigorous standard.

Christopher's interrupt system fails to disclose a nested interrupt controller configured to:

order for activation a plurality of pending interrupt handling programs based upon a comparison of respective first portions of priority level values associated with said plurality of pending interrupt handling programs and then for any pending interrupt handling programs having equal respective first portions upon a comparison of respective second portions of said priority level values.

(Quoted from claim 1). The Examiner relies on column 32, lines 46 to 67 of Christopher. The octal select codes (4 bit numbers) are divided into those with a leading zero bit, which are ascribed priority level 1, and those with a leading 1 bit, which are ascribed a priority level 2. The level 2 devices pre-empt a level 1 device, but do not pre-empt each other. As explicitly stated in Christopher at column 32, lines 58 to 62: "within a priority level all devices are of "equal" priority, and operation is of a *first come-first served basis*." Thus, Christopher orders pending interrupts depending upon when they arose. The interrupt that arose first is performed first.

This is different to the treatment of pending interrupts specified in the independent claims where for pending interrupt handling programs having *equal respective first portions*, a *comparison of the respective second portions is used so as to order those pending interrupt handling programs for activation*. This ordering of interrupts within the same priority group based on their second portion priority level is clearly not first-come-first-served as explicitly taught by Christopher.

The portion of Christopher at column 32, lines 62 to 65 deals with the case of "simultaneous requests" by two or more devices within the same priority level. Christopher is quite explicit in what it says: pre-emption is permitted of priority level 1 interrupts by priority

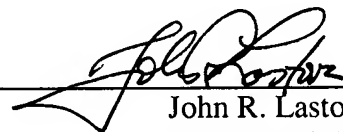
level 2 interrupts. *pending interrupts* are handled on a first-come-first served basis, while *simultaneous* interrupts are handled based upon the value of the select code. The instant claims recite that "any *pending interrupt* handling programs having equal respective first portions" is handled based "upon a comparison of respective second portions of said priority level values."

The anticipation rejection is in error and should be withdrawn. The application is in condition for allowance. An early notice to that effect is requested.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____



John R. Lastova
Reg. No. 33,149

JRL:sd
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100